Abstract

A superconducting cable according to the present invention includes a former [[(2)]], a superconducting conductor layer [[(3)]] formed around the outer circumference of the former [[(2)]], an electric insulating layer [[(4)]] formed around the outer circumference of the conductor layer [[(3)]], a shield layer [[(6)]] formed around the outer circumferential of the insulating layer [[(4)]], and a normal-conducting metal layer [[(5)]] formed between the insulating layer [[(4)]] and the shield layer [[(6)]]. The normal-conducting metal layer [[(5)]] existing inside shield layer [[(6)]] has an inductance greater than that of the shield layer [[(6)]], which can suppress a rise in temperature in the event of accidents such as short-circuits, and also can reduce AC losses since currents flow through shield layer [[(6)]] during the passage of normal currents.